

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHAL DIVISION**

HUAWEI TECHNOLOGIES CO. LTD.,

Plaintiff,

v.

**T-MOBILE US, INC. and
T-MOBILE USA, INC.,**

Defendants,

**NOKIA SOLUTIONS AND NETWORKS
US LLC, NOKIA SOLUTIONS AND
NETWORKS OY,
TELEFONAKTIEBOLAGET LM
ERICSSON, and ERICSSON INC.,**

Intervenors.

Case No. 2:16-cv-00052-JRG-RSP

JURY TRIAL DEMANDED

**T-MOBILE AND INTERVENORS' MOTION FOR PARTIAL SUMMARY JUDGMENT
OF NON-INFRINGEMENT OF U.S. PATENT NO. 8,867,339**

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
II. STATEMENT OF THE ISSUES TO BE DECIDED.....	2
III. STATEMENT OF MATERIAL UNDISPUTED FACTS	2
A. Overview of the '339 Patent	2
B. IPR Petition Seeking Review of '339 Patent	3
C. Huawei Told the PTO that Marking the PDP Context as Invalid is Outside the Scope of the '339 Claims	3
D. Huawei's Infringement Theory Is Based on Compliance with a Standard that Requires Marking the PDP Context as Invalid	5
IV. LEGAL STANDARD.....	6
V. ARGUMENT	7
A. Huawei's Clear and Unequivocal Statements to the PTO Constitute a Disavowal of Claim Scope.....	7
B. T-Mobile Cannot Infringe Any Asserted Claims As a Matter of Law in Light of Huawei's Disclaimer.....	8
VI. CONCLUSION.....	9

TABLE OF AUTHORITIES

Cases	<u>Page(s)</u>
<i>AI Automation, LLC v. Samsung Elecs. Co.</i> , Case No. 1:15-cv-52, 2015 WL 12669879 (E.D. Tex. Dec. 7, 2015)	8
<i>Aylus Networks, Inc. v. Apple, Inc.</i> , 856 F.3d 1353 (Fed. Cir. 2017)	1, 6, 7
<i>Biogen Idec, Inc. v. GlaxoSmithKline LLC</i> , 713 F.3d 1090 (Fed. Cir. 2013)	6
<i>Elbex Video, Ltd. v. Sensormatic Elecs. Corp.</i> , 508 F.3d 1366 (Fed. Cir. 2007)	7
<i>Krippelz v. Ford Motor Co.</i> , 667 F.3d 1261 (Fed. Cir. 2012)	7
<i>Saffran v. Johnson & Johnson</i> , 712 F.3d 549 (Fed. Cir. 2013)	7
<i>Seachange Int'l, Inc. v. C-COR Inc.</i> , 413 F.3d 1361 (Fed. Cir. 2005)	7
<i>Spectrum Int'l v. Sterilite Corp.</i> , 164 F.3d 1372 (Fed. Cir. 1988)	8
<i>Springs Window Fashions LP v. Novo Indus.</i> , 323 F.3d 989 (Fed. Cir. 2003)	7, 9

TABLE OF EXHIBITS

Exhibit 1 – U.S. Patent No. 8,867,339 (“the ’339 patent”)

Exhibit 2 – Petition for Inter Partes Review (IPR2017-0058, U.S. Patent No. 8,867,339) (January 10, 2017)

Exhibit 3 – Patent Owner Huawei Technologies’ Preliminary Response (IPR2017-0058, U.S. Patent No. 8,867,339) (April 27, 2017)

Exhibit 4 – Huawei’s Amended Second Supplement to Infringement Contentions for U.S. Patent No. 8,867,339 – Ex. C1

Exhibit 5 – Excerpts from the Initial Expert Report and Declaration of Ray Nettleton, Ph.D. (June 5, 2017)

Exhibit 6 – Exhibit E to the Initial Expert Report and Declaration of Ray Nettleton, Ph.D. (June 5, 2017)

Exhibit 7 – 3GPP TS 29.060 V.7.4.0 (2007-03) (produced at T-Mobile_00177012)

I. INTRODUCTION

T-Mobile moves for partial summary judgment of non-infringement with respect to Huawei’s infringement claims against T-Mobile’s 3G network because Huawei accuses of infringement the precise process and system that it expressly disavowed in repeated statements to the U.S. Patent and Trademark Office (“PTO”). The doctrine of prosecution disclaimer precludes patentees from recapturing claim scope that was disclaimed during prosecution.

The asserted patent at issue in this motion, the ’339 patent, relates to cellular networks and is currently the subject of an IPR petition. After the Court issued its *Markman* Opinion in this case in April 2017, Huawei submitted to the PTO its initial response in the IPR. In that response, Huawei repeatedly distinguished the prior art references on the grounds that they mark as “invalid” a particular claimed data structure, known as the “PDP context.” Huawei argued to the PTO, again and again, that this distinction is critical because all of the independent claims of the ’339 patent require that the PDP context *not* be marked as invalid. These statements—upon which the public is entitled to rely—constitute a clear and unmistakable disavowal of claim scope. *See Aylus Networks, Inc. v. Apple, Inc.*, 856 F.3d 1353, 1361 (Fed. Cir. 2017) (finding that patentee’s statements during IPR proceeding “support a finding of prosecution disclaimer.”).

Given this clear and unequivocal disclaimer, the evidence upon which Huawei relies to prove infringement establishes that T-Mobile’s 3G networks do not infringe the asserted claims. Indeed, Huawei premises its infringement case on T-Mobile’s compliance with a particular cellular standard, yet this standard expressly states that the PDP context *is* marked as invalid. Because Huawei accuses of infringement the very functionality it has disclaimed, partial summary judgment of non-infringement is warranted.

II. STATEMENT OF THE ISSUES TO BE DECIDED

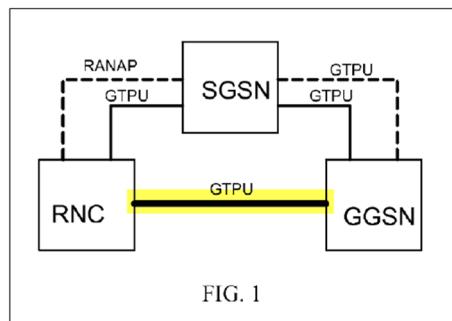
1. Whether Huawei's recent statements to the PTO regarding the independent claims of the '339 patent constitute a disavowal of claim scope.
2. Whether there is any genuine dispute of material fact preventing summary judgment of non-infringement with respect to T-Mobile's accused 3G network.¹

III. STATEMENT OF MATERIAL UNDISPUTED FACTS

A. Overview of the '339 Patent

Huawei filed its complaint on January 15, 2016, alleging that T-Mobile infringes four patents relating to cellular communications technology, including U.S. Patent No. 8,867,339 ("the '339 patent"). *See* Complaint at ¶65. Huawei currently asserts infringement of claims 1, 3-5, 7-9, 11-14, and 16 of the '339 patent. *See* Dkt. 237 (Election of Claims). Of these, claims 1, 3, 9, 11, and 14 are independent claims.

The '339 patent relates to error recovery in a prior art cellular architecture known as "One Tunnel" or "Direct Tunnel." *See* '339 Pat. at 1:27-37. According to the '339 specification, the 3GPP standards organization developed the One Tunnel architecture to allow a direct data link, or tunnel, between two network components—the RNC and the GGSN—as shown below:



'339 Pat. at Fig. 1 (emphasis added); *see also* Dkt. 196 (Markman Opinion) at 4-5.

¹ T-Mobile separately moves for partial summary judgment of non-infringement with respect to Huawei's infringement claims against T-Mobile's LTE network, on the basis of prosecution history estoppel, in a concurrently filed motion.

The '339 patent purports to improve upon this existing One Tunnel architecture by proposing a recovery procedure to use when there is a tunnel error or failure. *See, e.g.*, '339 Pat. at Abstract. One aspect of this recovery procedure involves managing a data structure, called the "PDP context," that contains the session information relating to the user's cellular data connection. *See, e.g. id.* at 4:63-65 ("the GGSN updates the corresponding PDP context according to the received tunnel resource information allocated by the RNC and recovers the downlink data tunnel."); *see also* Figs. 2, 4, 6 and claims 1, 9, 11, and 14. One of the stated goals of the '339 patent is to manage the PDP context such that a data tunnel can be recovered in a manner that minimizes interruption to the user's data session. *Id.* at 2:12-26, 2:30-34, 3:24-31; *see also* Dkt. 196 (*Markman* Opinion) at 5-6.

B. IPR Petition Seeking Review of '339 Patent

On January 5, 2017, the Nokia intervenors filed an IPR petition challenging the validity of the asserted claims of the '339 patent. *See* Ex. 2 (IPR Petition). The IPR petition seeks to demonstrate, *inter alia*, how the combination of two prior art standards-related documents renders the '339 claims obvious: TR 23.809 (a 3GPP technical report) and the Ericsson Submission (a 3GPP working group proposal relating to TR 23.809). *Id.* at 26-29.

Meanwhile, in the months following the filing of the IPR petition, the parties filed their claim construction briefing in the present case and the Court held its *Markman* hearing on March 2, 2017. *See* Dkts. 126, 130, 160. The Court subsequently issued its *Markman* Opinion on April 15, 2017. Dkt. 196. Approximately two weeks later, on April 27, 2017, Huawei filed its Patent Owner Preliminary Response (POPR) in the pending IPR. *See* Ex. 3 (POPR).

C. Huawei Told the PTO that Marking the PDP Context as Invalid is Outside the Scope of the '339 Claims

In its POPR, Huawei makes multiple statements to the PTO that give rise to the present

motion. Huawei repeatedly asserts that one of the key prior art references, TR 23.809, cannot be invalidating prior art because it teaches that, when a tunnel error occurs, *the PDP context is marked as invalid*—which, according to Huawei, is antithetical to both the requirements of the asserted claims and the purpose of the overall invention. *See* Ex. 3 (POPR) at 1, 20-24.

Starting on the very first page of the POPR, Huawei declares that a system using TR 23.809 could not embody “each element” of the asserted claims “because TR 23.809 V0.3.0 expressly describes [that] its GGSN marks the PDP context as invalid.” *Id.* at 1 (emphasis added). This distinction forms the basis of Huawei’s primary attack on the merits of the TR 23.809 obviousness combination. Indeed, Huawei’s argument heading reads as follows: “Petitioners’ proposed combination fails to provide a GGSN that preserves the PDP context, as required by all independent claims, because TR 23.809 V0.3.0 expressly describes [that] its GGSN marks the PDP context as invalid.” *Id.* at 20 (emphasis added).

Huawei then reiterates that every independent claim of the ’339 patent, without exception, requires that the PDP context *not* be marked as invalid:

Independent Claim 1 expressly requires the step of “updating, by the core network user plane anchor [e.g. GGSN], a corresponding PDP context according to the update PDP context request.” ’339 Patent, cl. 1. Accordingly, instead of marking the PDP context as invalid and releasing the information or resources allocated to the user, claim 1 requires communications for the user to be re-established with a preserved PDP context. Likewise, each challenged independent claim similarly requires that the GGSN not mark the PDP context as invalid in response to an error indication received from an access network device (e.g. from an RNC).²

Id. (emphases added).

Huawei goes on to state that TR 23.809 could not possibly teach the claimed process of updating the information relating to the PDP context because TR 23.809 “**has marked its version**

² Immediately following this sentence, Huawei includes a string cite specifically identifying exemplary limitations from each of the remaining independent claims that purportedly require that the GGSN not mark the PDP context as invalid. *See* Ex. 3 (POPR) at 20-21.

of the PDP context as invalid which would make it unusable for any update.” *Id.* at 21 (emphasis in original).

D. Huawei’s Infringement Theory Is Based on Compliance with a Standard that Requires Marking the PDP Context as Invalid

Huawei’s infringement theory in this case depends on its contention that the ’339 patent is a standards-essential patent. In particular, Huawei contends that the ’339 patent claims are essential to the 3GPP standard TS 23.060. *See* Ex. 4 (Infring. Contentions) at 1; Ex. 5 (Nettleton Open. Rep.) ¶198. And Huawei’s infringement theory is expressly predicated on its contention that T-Mobile complies with TS 23.060—Dr. Nettleton, Huawei’s technical expert, opines that “[b]y complying with the standards set forth in 23.060, T-Mobile necessarily practices the asserted claims.” Ex. 6 (Nettleton Open. Rep., Ex. E) at 2.

Significantly, TS 23.060—the very standard on which Huawei and Dr. Nettleton rely to prove infringement—teaches that *the PDP context is marked as invalid* when a tunnel error occurs. As shown in the passage below, Section 13.8.6 of TS 23.060 specifies that if the GGSN receives a tunnel error when using a One Tunnel (or Direct Tunnel) architecture, the GGSN should mark the PDP context invalid:

If the GGSN receives a GTP error indication for a PDP context that has the DTI flag set (i.e., from an RNC), the GGSN should not delete the associated PDP context but mark it as invalid. Any subsequent packets arriving for an invalid PDP context should be discarded.

Ex. 7 (3GPP TS 23.060) at §13.8.6 (emphasis added).³ Dr. Nettleton points to this very passage as demonstrating “the required behavior of the GGSN” when it receives a tunnel error. Ex. 5 (Nettleton Open. Rep.) ¶204.

Indeed, in multiple instances in his report, Dr. Nettleton expressly affirms that TS 23.060

³ GTP is an abbreviation for “GPRS Tunnel Protocol.” *See id.* at §3.2. DTI is an abbreviation for “Direct Tunnel Indicator.” *Id.*

calls for the PDP context to be marked as invalid. *See id.* ¶192 (“[Section 13.8.6] clearly indicates that when the GGSN receives an Error Indication from the RNC on a PDP context that has direct tunnel enabled, the GGSN does not delete the PDP context but marks it as invalid.”); ¶207 (“The GGSN does not delete the PDP context but marks it invalid, so that the ‘related PDP context’ ‘shall’ be set as valid again.”) (emphasis added in both).

Despite the clear teaching of this standard, and despite the fact that it describes the precise functionality Huawei told the PTO could not embody any of the ’339 claims, Dr. Nettleton consistently cites this very passage of TS 23.060 in support of his infringement opinions. *See, e.g., id.* ¶628; Ex. 6 (Nettleton Open. Rep., Ex. E) at 3, 33-34.

IV. LEGAL STANDARD

“Prosecution disclaimer preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution.” *Aylus*, 856 F.3d at 1359 (citation, internal quotations omitted). For a disclaimer to occur, it is required that “the alleged disavowing actions or statements made during prosecution be both clear and unmistakable.” *Id.* (citation omitted). “Thus, when the patentee unequivocally and unambiguously disavows a certain meaning to obtain a patent, the doctrine of prosecution history disclaimer narrows the meaning of the claim consistent with the scope of the claim surrendered.” *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013).

Importantly, this doctrine “promotes the public notice function of the intrinsic evidence and protects the public’s reliance on definitive statements made during prosecution.” *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1371 (Fed. Cir. 2007) (citation omitted). “The public notice function of a patent and its prosecution history requires that a patentee be held to what he declares during prosecution of his patent.” *Springs Window Fashions LP v. Novo Indus.*, 323 F.3d 989, 995 (Fed. Cir. 2003).

Because the focus of the doctrine is on holding inventors to what they tell the public about the scope of their patents, clear and unequivocal statements may result in a disclaimer regardless of whether the PTO actually relies on or agrees with the statements. *See, e.g., Saffran v. Johnson & Johnson*, 712 F.3d 549 (Fed. Cir. 2013) (“[A]n applicant’s argument that a prior art reference is distinguishable on a particular ground can serve as a disclaimer of claim scope even if the applicant distinguishes the reference on other grounds as well.”) (citation omitted); *Seachange Int’l, Inc. v. C-COR Inc.*, 413 F.3d 1361, 1374 (Fed. Cir. 2005) (“An applicant’s argument made during prosecution may lead to a disavowal of claim scope even if the Examiner did not rely on the argument.”).

The Federal Circuit has recently affirmed that “statements made by a patent owner during an IPR proceeding can be considered during claim construction and relied upon to support a finding of prosecution disclaimer.” *Aylus*, 856 F.3d at 1361; *see also Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1266 (Fed. Cir. 2012) (applying prosecution history disclaimer to statements made during reexamination). Statements made during an IPR proceeding may operate as disclaimers regardless of whether the PTO ultimately decides to institute the IPR on the claims-at-issue. *Aylus*, 856 F.3d at 1363-64.

V. ARGUMENT

A. Huawei’s Clear and Unequivocal Statements to the PTO Constitute a Disavowal of Claim Scope

As shown above, in order to distinguish the prior art cited in the IPR petition, Huawei told the PTO clearly and unmistakably that marking the PDP context as invalid is outside the scope of the ’339 patent claims. These attempts to distinguish the prior art constitute a textbook example of prosecution disclaimer. *See, e.g., Spectrum Int’l v. Sterilite Corp.*, 164 F.3d 1372, 1378–79 (Fed. Cir. 1988) (“[B]y distinguishing the claimed invention over the prior art, an

applicant is indicating what the claims do not cover.”); *AI Automation, LLC v. Samsung Elecs. Co.*, Case No. 1:15-cv-52, 2015 WL 12669879, *5-6 (E.D. Tex. Dec. 7, 2015) (finding a “clear and unmistakable disavowal of claim scope” when patentee repeatedly argued during reexamination that the prior art did not disclose a calculator with animated calculations).

Moreover, it is beyond question that Huawei was not merely making passing observations about the prior art, but instead was making statements about the scope of the ’339 claims. Huawei’s own words are clear and unequivocal: “Likewise, each challenged independent claim similarly requires that the GGSN not mark the PDP context as invalid in response to an error indication received from an access network device (e.g. from an RNC).” Ex. 3 (POPR) at 20 (emphasis added). Huawei’s statements are thus unambiguous declarations to the public that the ’339 patent does not cover any method or device that marks the PDP context as invalid.

Consequently, the doctrine of prosecution disclaimer attaches and the scope of the claims should be limited accordingly.

B. T-Mobile Cannot Infringe Any Asserted Claims As a Matter of Law in Light of Huawei’s Disclaimer

Given Huawei’s clear disclaimer, summary judgment of non-infringement is warranted. In particular, Huawei’s infringement theory is expressly premised on its contention that T-Mobile’s 3G network complies with the tunnel error recovery protocol of TS 23.060. *See, e.g.*, Ex. 6 (Nettleton Open. Rep., Ex. E) at 2 (“By complying with the standards set forth in 23.060, T-Mobile necessarily practices the asserted claims.”). Yet, as explained above, Huawei’s own infringement expert, Dr. Nettleton, repeatedly affirms and relies on the fact that TS 23.060 actually requires the GGSN to mark the PDP context as invalid. *See supra* Section III.D. Indeed, Dr. Nettleton characterizes the key section of TS 23.060—which states that “the GGSN

should not delete the associate PDP context but mark it as invalid”—as describing “the required behavior” of T-Mobile’s 3G network. Ex. 5 (Nettleton Open. Rep) ¶204 (emphasis added).

It thus cannot be disputed that Huawei is now accusing of infringement the very process and system that it repeatedly disclaimed as outside the scope of the ’339 claims: marking the PDP context as invalid. As the Federal Circuit has made clear, the doctrine of prosecution disclaimer is meant to prevent just this situation: “A patentee may not state during prosecution that the claims do not cover a particular device and then change position and later sue a party who makes that same device for infringement.” *Springs Window*, 323 F.3d at 995-96 (affirming grant of summary judgment of non-infringement based on prosecution disclaimer).

VI. CONCLUSION

For the foregoing reasons, T-Mobile respectfully requests that its motion for partial summary judgment be granted.

Dated: July 21, 2017

By: /s/ Mark D. Selwyn

Mark D. Selwyn
(California Bar No. 244180)
Kathryn D. Zalewski (California Bar No.
263119)
**WILMER CUTLER PICKERING
HALE AND DORR LLP**
950 Page Mill Road
Palo Alto, California 94304
(650) 858-6000

Joseph J. Mueller
(Massachusetts Bar No. 647567)
Cynthia Vreeland
(Texas Bar No. 20625150
Massachusetts Bar No. 635143)
**WILMER CUTLER PICKERING
HALE AND DORR LLP**
60 State Street
Boston, MA 02109
(617) 526-6000

Josh A. Krevitt (New York Bar No. 2568228)
GIBSON, DUNN & CRUTCHER LLP
200 Park Avenue, 47th Floor
New York, New York 10166
Tel: (212) 351-4000
Fax: (212) 351-4035

Mark N. Reiter (Texas Bar No. 16759900)
GIBSON, DUNN & CRUTCHER LLP
2100 McKinney Avenue, Suite 1100
Dallas, Texas 75201
Tel: (214) 698-3100
Fax: (214) 571-2900

Y. Ernest Hsin (California Bar No. 201668)
GIBSON, DUNN & CRUTCHER LLP
555 Mission Street
San Francisco, CA 94105-0921
Tel: (415) 393-8224
Fax: (415) 374-8436

Stuart M. Rosenberg (California Bar No.
239926)

GIBSON, DUNN & CRUTCHER LLP
1881 Page Mill Road
Palo Alto, CA 94304-1211
Tel: (650) 849-5389
Fax: (650) 849-5089

Michael E. Jones
Texas Bar No. 10929400
mikejones@potterminton.com
E. Glenn Thames, Jr.
Texas Bar No. 00785097
glennthames@potterminton.com
POTTER MINTON, PC
110 North College Ave., Suite 500
Tyler, Texas 75702
Tel: 903-597-8311
Fax: 903-593-0846

*Counsel for Defendants T-Mobile US,
Inc. and T-Mobile USA, Inc.*

/s/ John D. Haynes
John D. Haynes (GA Bar No. 340599)
Patrick J. Flinn (GA Bar No. 264540)
Michael C. Deane (GA Bar No. 498195)
ALSTON & BIRD LLP
1201 W. Peachtree St.
Atlanta, GA 30309-3424
Telephone: (404) 881-7000
Facsimile: (404) 881-7777
Email: John.Haynes@alston.com
Email: Patrick.Flinn@alston.com
Email: Michael.Deane@alston.com

Michael J. Newton (TX Bar No. 24003844)
ALSTON & BIRD LLP
2800 N. Harwood St., Suite 1800
Dallas, Texas 75201
Telephone: (214) 922-3400
Facsimile: (214) 922-3899
Email: Mike.Newton@alston.com
Email: Derek.Neilson@alston.com

M. Scott Stevens (NC Bar No. 37828)

Ross R. Barton (NC Bar No. 37179)
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Telephone: (704) 444-1000
Facsimile: (704) 444-1111
Email: Scott.Stevens@alston.com
Email: Ross.Barton@alston.com

Deron R. Dacus (Texas State Bar No. 790553)
THE DACUS FIRM, P.C.
821 ESE Loop 323, Suite
430 Tyler, TX 75701
Telephone: (903) 705-1117
Facsimile: (903) 581-2543

*Counsel for Intervenors Nokia Solutions
and Networks US LLC and Nokia Solutions
and Networks Oy*

/s/ Phillip B. Philbin
Phillip B. Philbin
LEAD ATTORNEY
State Bar No. 15909020
Jamie H. McDole
State Bar No. 24082049
Charles M. Jones II
State Bar No. 24054941
Michael D. Karson
State Bar No. 24090198
Matthew P. Chiarizio
State Bar No. 24087294
Tiffany M. Cooke
State Bar No. 24087340
HAYNES AND BOONE, LLP
2323 Victory Avenue
Suite 700
Dallas, Texas 75219
Tel.: (214) 651-5000
Fax: (214) 651-5940
Email: phillip.philbin@haynesboone.com
jamie.mcdole@haynesboone.com
charlie.jones@haynesboone.com

michael.karson@haynesboone.com
matthew.chiarizio@haynesboone.com
tiffany.cooke@haynesboone.com

Jason T. Lao
California State Bar No. 288161
HAYNES AND BOONE, LLP
600 Anton Boulevard, Suite 700
Costa Mesa, California 92626
Tel.: (949) 202-3051
Fax: (949) 202-3151

Counsel for Intervenors
Telefonaktiebolaget LM Ericsson and
Ericsson Inc.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on July 21 2017, by electronic mail upon all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system per Local Rule CV-5(a)(3).

Dated: July 21, 2017

/s/ Gaya Holman

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

I hereby certify that Exhibits 4, 5 and 6 to the foregoing document are authorized to be filed under seal pursuant to the Protective Order entered in this case.

Dated: July 21, 2017

/s/ Gaya Holman